Songbirds and Raptors



Tennessee Department of Agriculture, Division of Forestry

Open fields, brush, swamps, moist woods, dry woods, open woods, tall timber, dense tangled undergrowth, back yards, woodland margins – each is favored habitat for a number of bird species. You can attract many species by creating diverse habitat. Or you can tailor your forest for specific species.

The greatest numbers of species and individuals can generally be found near water and at forest edges. "Edge" is the transition from open land to forest. Edges should undulate and should be "feathered" (not abrupt or "hard".) Feathered edges, ideally 150' wide, taper in height and density, from 25% tree removal near the woods to 75% near the opening. A feathered edge allows a rich understory to grow, diversifies the habitat, and helps protect against predators and cowbirds than does an abrupt edge.

Brown-headed cowbirds are the greatest threat to songbirds in the U.S. Cowbirds live in agricultural areas and fly into the forest as far as a few miles to lay eggs in other birds' nests. Some songbird species kill cowbird chicks, but others raise them. For these songbirds, areas not easily accessible to cowbirds – including newly harvested forest - are prime habitat.

While some bird species thrive in a diverse setting, others need large uniform habitats. Groups or "suites" of species share a given habitat. The suite currently of most concern uses large blocks (5,000 acres or more is optimal) of tall trees. Species include cerulean warbler, wood thrush, worm-eating warbler, wood peewee, Kentucky warbler and the acadian fly catcher. Retaining large tracts of tall timber, or land adjacent to large tracts, will benefit this suite. Some timber harvesting (on a long "rotation" basis) can be compatible with this suite, and may even benefit it.

Clearcuts and young second-growth forests are also currently lacking for suites including prairie warbler and woodcock. Bottomland forests are another critically important bird habitat.

Any forest management, including no action, will benefit certain species and detract from others.

The best thing most landowners can do to conserve songbirds and raptors is to leave all or most of the trees within 100 feet of perennial streams.

Cover protects birds from predators and weather. Pines (especially white pine), cedars, brambles and tree cavities provide good cover, perches for resting, roosting and singing, and insects. When harvesting timber, especially when clearfelling large areas,

- Leave the largest diameter trees having active cavities, and 3-5 trees around them.
- Leave these clumps on lower slopes, upper slopes, and near edges of clearcuts. Clumps in the middle of large clearcuts should be connected to the surrounding forest by strips of trees (travel lanes.)
- Try to leave at least one or two clumps per acre
- If there are plenty of cavity trees to choose from, retain those that are long-lived (white oak, beech, sugar maple, yellow poplar), large in diameter and bear mast (food.)
- Leave 2 or more snags per acre.
 These should be at least 12" diameter and 10' tall. Unlike live cavity trees, snags don't inhibit seedling growth.

 Snags can be created by girdling live trees of low commercial value.

Raptors benefit from perches in or near weedy or cut-over areas where small mammals, birds and snakes are abundant.

In addition, don't harvest timber during nesting season (April to July for almost all songbirds, and as early as February for

hawks and owls) and avoid using insecticides (especially broad-spectrum insecticides) in the spring, since many songbirds eat insects.

References:

- various field guides
- Land Manager's Guide to the Birds of the South by Paul Hammel, US Forest Service General Technical Report SE-22, published by the Nature Conservancy
- Breeding Bird Atlas (UT Press)
- Nature Conservancy (Bob Ford), Jackson TN 901-327-1752

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